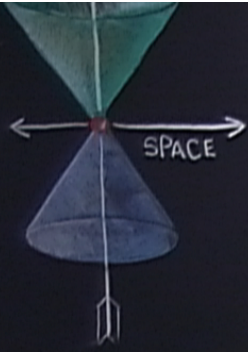


Title: The classification of well behaved simple C^* -algebras

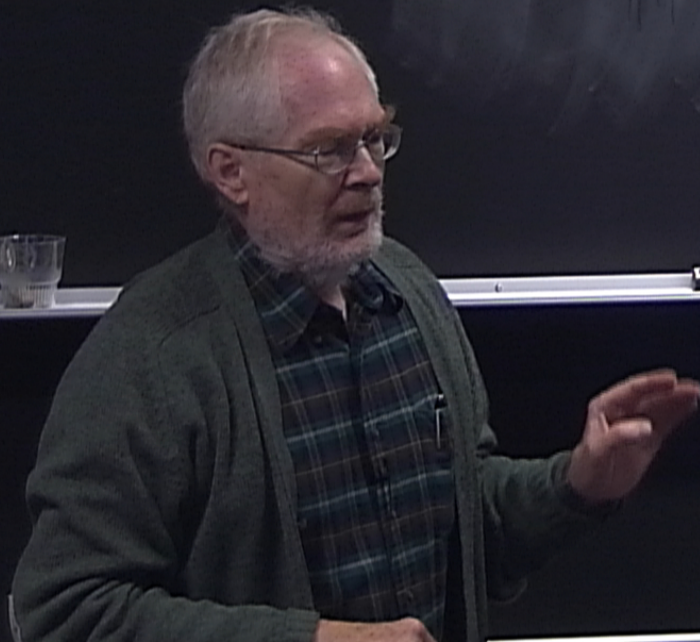
Date: Sep 12, 2015 10:30 AM

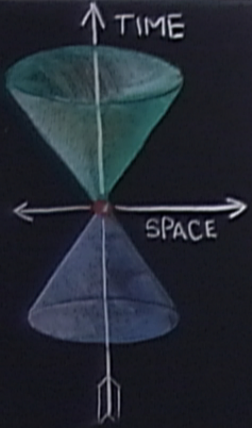
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Abstract:

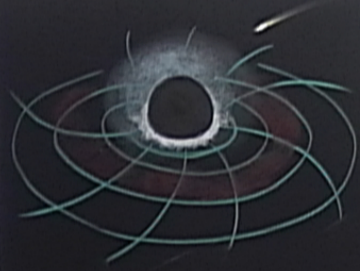


Classification of simple separable unital (*)

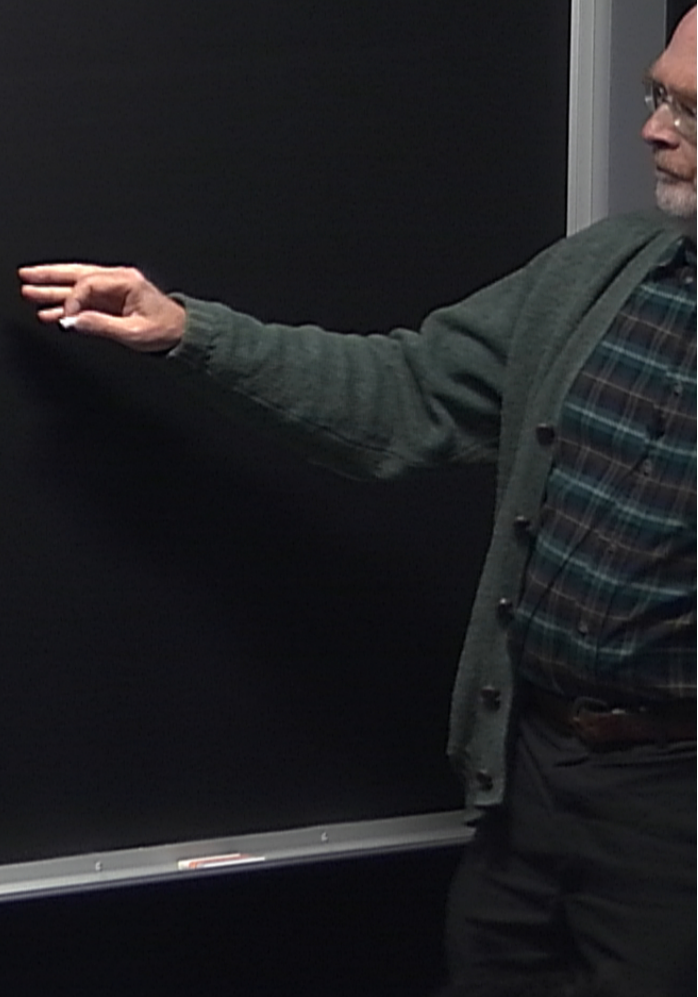




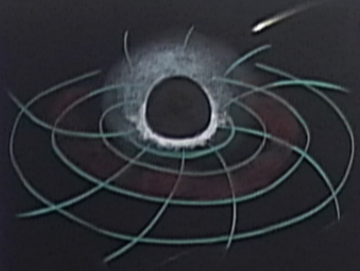
Classification of simple
separable unital (\cdot) $(?)$
 C^* -algebra with finite nuclear dimension
holds. (well behaved)



C^* -algebra.
(concrete, abstract)



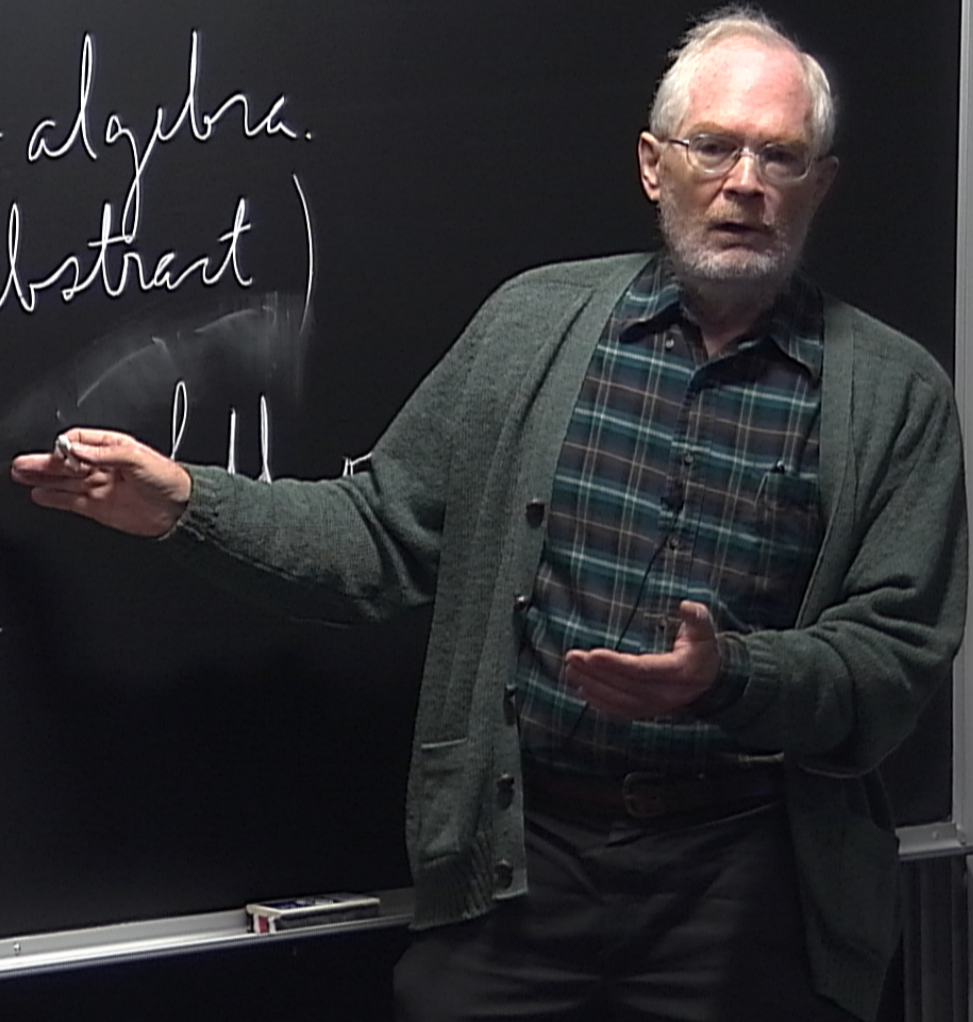
CAUTION



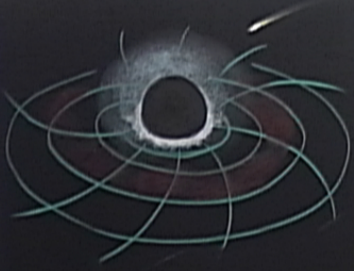
C^* -algebra.
(concrete, abstract)

$$S \subseteq S^*$$
$$S^* = S$$

$$B(H)$$
$$T, T^*$$



CAUTION



C^* -algebra.
(concrete, abstract)

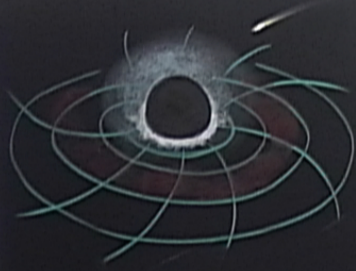
$$H \stackrel{\text{anti}}{=} H^*$$

bdd operators.

$$S \subseteq S^* = S$$

$$B(H) \uparrow, T^*$$

CAUTION



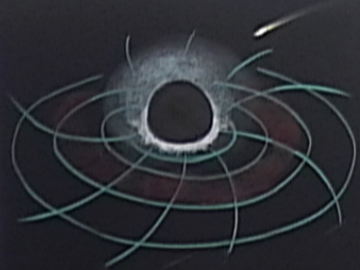
C^* -algebra. (concrete, abstract) (complex)

$$H \stackrel{\text{anti}}{=} H^*$$

bdd operators.

$$S \subseteq S^* = S$$

$$B(H) \downarrow \\ \uparrow, \uparrow^*$$



C^* -algebra (complex)

closed (concrete, abstract)

$H \stackrel{\text{anti}}{=} H^*$

$S \subseteq B(H)$ subalgebra, norm-closed
 $S^* = S$ self-adjoint
 T, T^* adjoint operators
 \rightarrow self-adjoint operators

CAUTION

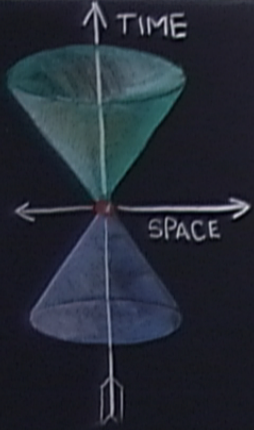
K-theory is the invariant

compact

$$X \in \mathcal{B}(H) \rightarrow \mathcal{B}(H) / \mathcal{K}(H)$$

$$I \subseteq A \rightarrow A/I$$

H



Classification of simple
separable unital C^* -algebra (1) (?)
 C^* -algebra with finite nuclear dimension
holds. (well behaved)

K -theory is the invariant $M_2 \otimes M_2 \otimes \dots$
 compact
 $X \in B(H) \rightarrow B(H) / K(H)$

$C A$ $I \subseteq A \rightarrow A/I$
 $A \rightarrow A$
 $C([0,1], A) \rightarrow B H$

K -theory is the invariant

$M_2 \otimes M_2 \otimes \dots$
 \mathbb{N} \mathbb{N}
Glimm

compact

$$K \in B(H) \rightarrow B(H) / K(H)$$

$$C A$$

$$I \subseteq A \rightarrow A/I$$

$$A \rightarrow A$$

$$C([0,1], A) \rightarrow B H$$

K_1 - countable abelian groups, arbitrary

